

Ser. No. 09/817,322

PATENT  
2001P04776US

## Claims

1. (Previously Amended) A system for use in a first application concurrently operating together with a plurality of network compatible applications, comprising:

an entitlement processor for enabling user access to a first application of a plurality of concurrently operating applications in response to validation of user identification information; and

a communication processor employed by said first application of said plurality of concurrently operating applications for intermittently communicating an activity indication to a managing application within a timeout window, said activity indication being communicated sufficiently often to prevent an inactivity timeout of said first application being initiated by said managing application in response to said timeout window being exceeded.

2. (Previously Amended) A system according to claim 1, wherein said intermittently communicated activity indication prevents an inactivity timeout of said plurality of concurrently operating applications of a particular user initiated session.

3. (Original) A system according to claim 1, wherein said communication processor stores a plurality of activity indications and sends said plurality of activity indications as a batch to said managing application.

4. (Previously Amended) A system according to claim 3, wherein said communication processor intermittently communicates said activity indication to said managing application in response to a user action and said user action comprises at least one of, (a) keyboard activity, (b) mouse activity, (c) other data entry device activity, and (d) another user initiated PC application operation activity.

Ser. No. 09/817,322

PATENT  
2001P04776US

5. (Previously Amended) A system according to claim 1, wherein said first application and said managing application reside in the same PC and

said activity indication notifies said managing application of activity by said first application and includes one or more of, (a) a session identifier for identifying a particular user initiated session, (b) a URL to be contacted if said activity notification is not successful, (c) an identification of a type of event preventing said activity notification from being successful.

6. (Original) A system according to claim 1, wherein said communication processor intermittently communicates activity indications to said managing application using a plurality of different commands including an activity notification command and a command involving at least one of, (a) determining a user operation session identifier from said managing application and (b) sending a URL to said managing application.

7. (Original) A system according to claim 1, wherein said communication processor communicates to said managing application a request to receive an activity indication associated with said first application and maintained by said managing application, said activity indication indicating time since the last activity update.

8. (Previously Amended) A system according to claim 1, wherein individual applications of said plurality of concurrently operating applications independently intermittently communicate an activity indication to said managing application and

said communication processor communicates with a browser application providing a user interface display permitting user entry of identification information for validation by said entitlement processor.

9. (Original) A system according to claim 1, wherein said communication processor communicates a time-out threshold value comprising said timeout window to said managing application.

Ser. No. 09/817,322

PATENT  
2001P04776US

10. (Original) A system for use by a managing application supporting concurrent operation of a plurality of Internet compatible applications, comprising:

an input processor for intermittently receiving activity indications from a plurality of concurrently operating applications;

an activity monitor for updating individual activity status indicators, corresponding to said plurality of concurrently operating applications, in response to said received activity indications;

a comparator for comparing individual activity status indicators with corresponding time-out threshold values to identify an application time-out event indicated by a status indicator exceeding said time-out threshold; and

a communication processor for communicating notice of said application time-out event to one of said plurality of concurrently operating applications.

11. (Previously Amended) A system according to claim 10, wherein said activity indications received by said input processor are provided in response to a user action and

said user action comprises at least one of, (a) keyboard activity, (b) mouse activity, (c) other data entry device activity, and (d) another user initiated PC application operation activity.

12. (Original) A system according to claim 10, wherein an activity status indicator comprises a time indication identifying when activity of a particular application was last reported, and

said time-out threshold comprises a predetermined time duration and said managing application determines said particular application to be inactive if said time indication exceeds said time-out threshold.

13. (Original) A system according to claim 10, wherein said input processor receives activity indications from a plurality of different commands including an activity notification command and a command involving at least one of, (a) determining a user operation session identifier from said managing application and (b) sending a URL to said managing application.

Ser. No. 09/817,322

PATENT  
2001P04776US

14. (Original) A system according to claim 10, wherein  
said communication processor communicates notice of said application  
time-out event to applications of said plurality of concurrently operating applications  
that have previously requested a notification of session termination.

15. (Original) A system according to claim 10, wherein  
said communication processor communicates notice of said application  
time-out event in response to at least one condition of, (a) a received command  
requesting notification and (b) a received communication from an application session  
having previously produced a time-out event and (c) automatically upon generation of  
said time-out event.

16. (Original) A system according to claim 10, wherein  
said activity indication includes one or more of, (a) an identification of  
a particular user initiated session, (b) a URL to be contacted if said activity  
notification is not successful, (c) an identification of a type of event preventing said  
activity notification from being successful.

17. (Original) A system according to claim 10, wherein  
said corresponding time-out threshold values comprise a common  
timeout period for said plurality of concurrently operating applications.

18. (Original) A system according to claim 10, wherein  
said comparator uses a predetermined default value for said time-out  
threshold values.

Ser. No. 09/817,322

PATENT  
2001P04776US

19. (Previously Amended) A system supporting concurrent operation of a plurality of Internet compatible applications, comprising:

a browser application providing a user interface display permitting user entry of identification information and commands for a plurality of Internet compatible applications; and

a managing application for receiving activity indications from a plurality of concurrently operating applications, said plurality of concurrently operating applications being initiated by user commands via said browser user interface, said received activity indications being provided by individual applications sufficiently frequently to prevent an inactivity timeout of said individual applications.

20. (Original) A system according to claim 19, wherein

said activity indication notification includes one or more of, (a) an identification of a particular user initiated session, (b) a URL to be contacted if said activity notification is not successful, (c) an identification of a type of event preventing said activity notification from being successful.

21. (Original) A system according to claim 19, wherein

a common timeout period is used as said inactivity timeout for said plurality of concurrently operating applications.

22. (Previously Amended) In a system supporting concurrent operation of a plurality of network compatible applications, a method comprising the steps activities of:

intermittently receiving activity indications from a plurality of concurrently operating applications;

updating individual activity status indicators, corresponding to said plurality of concurrently operating applications, in response to said received activity indications;

comparing individual activity status indicators with corresponding time-out threshold values to identify an application time-out event indicated by a status indicator exceeding said time-out threshold; and

communicating notice of said application time-out event to one of said plurality of concurrently operating applications.

Ser. No. 09/817,322

PATENT  
2001P04776US

23. (Previously Amended) A method employed by a first application operating in a system supporting concurrent operation of a plurality of network compatible applications, said method comprising the activities of:

enabling user access to a first application of a plurality of concurrently operating applications in response to validation of user identification information; and

supporting intermittent communication by said first application of an activity indication to a managing application within a timeout window, said activity indication notification being communicated sufficiently often to prevent an inactivity timeout of said first application by said managing application in response to said timeout window being exceeded.

24. (Previously Added) In a system supporting concurrent operation of a plurality of network compatible applications, a method comprising the activities of:

intermittently receiving activity indications from a plurality of concurrently operating applications of a particular operating session of a user;

updating a single activity status indicator associated with said plurality of concurrently operating applications of said particular operating session, in response to said received activity indications;

comparing said single activity status indicator with a time-out threshold value to identify a time-out event indicated by a status indicator exceeding said time-out threshold; and

re-initializing said plurality of concurrently operating applications in response to said comparison.

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**